

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. G UTLX114698 09/471,816 12/22/99 BERTINI **EXAMINER** MMC2/0221 CHRISTENSEN O'CONNOR JOHNSON & KINDNESS NGUYEN, C **ART UNIT** PAPER NUMBER 1420 FIFTH AVENUE SUITE 2800 2831 SEATTLE WA 98101-2347 **DATE MAILED:**

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/471,816

Applicant(s)

Bertini et al.

Examiner

Chau Nguyen

Group Art Unit 2831



X Responsive to communication(s) filed on Dec 13, 2000	
☑ This action is FINAL.	
Since this application is in condition for allowance except for for in accordance with the practice under Ex parte Quayle, 1935 C.	
A shortened statutory period for response to this action is set to ex is longer, from the mailing date of this communication. Failure to reapplication to become abandoned. (35 U.S.C. § 133). Extensions 37 CFR 1.136(a).	espond within the period for response will cause the
Disposition of Claims	
X Claim(s) 1-33	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	
☐ Claims	
Application Papers	_
☐ See the attached Notice of Draftsperson's Patent Drawing Re	view, PTO-948.
☐ The drawing(s) filed on is/are objected t	to by the Examiner.
☑ The proposed drawing correction, filed on Dec 13, 2000	is 🛚 🔀 approved 🗀 disapproved.
\square The specification is objected to by the Examiner.	
\square The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	
☐ Acknowledgement is made of a claim for foreign priority under	er 35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the	priority documents have been
received.	
received in Application No. (Series Code/Serial Number	
\square received in this national stage application from the Inte	rnational Bureau (PCT Rule 17.2(a)).
*Certified copies not received:	·
☐ Acknowledgement is made of a claim for domestic priority ur	nder 35 U.S.C. § 119(e).
Attachment(s)	
Notice of References Cited, PTO-892	
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).	
☐ Interview Summary, PTO-413	
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	
☐ Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON THE	EOU OWING BACES

Art Unit: 2831

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c). The residence of inventor Stagi has been altered without an initial.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not provide a written description to describe how each open end of the first conduit is adapted to receive the interior end of the first cable as claimed in claim 1 because the first cable has only one interior end.

Art Unit: 2831

Claims 2-13 are included in this rejection because of dependency.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 4-5, the recitation "each open end of the conduit adapted to receive the interior end of the first information transmitting cable" is indefinite since the first cable has only one interior end.

Claim 12, lines 3-4, the recitation "the second information transmitting cable adapted to be received within the other of the open ends of the first conduit" is indefinite since claim 1 recites that each open end of the first conduit is adapted to receive the interior end of the first information transmitting cable.

Claims 2-11, and 13 are included in this rejection because of dependency.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2831

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Scardina (4,450,318).

Scardina discloses a connector for a first information transmitting cable (14) which has an outer surface, an interior end, an exterior end, and a central conductor portion, the connector comprising a first conduit (sleeve 28) having open ends (first and second), one of the open ends adapted to receive the interior end of the first cable, the first conduit including a hollow interior to permit the passage of a fluid (34) therethrough, the first conduit being capable of forming a fluid tight seal between the first conduit and a portion of the first cable, and a second conduit (30) having open ends, wherein the second conduit encases the first conduit to seal the first conduit within the second conduit (claim 1). Scardina also discloses an insulation sleeve adapted to cover the central conductor portion of the cable, wherein the first conduit is located on the insulation sleeve to create a fluid tight seal therebetween (claim 10) and a second cable having an outer surface, an interior end, an exterior end, and a central conductor portion, the second cable adapted to be received within the other of the open ends of the first conduit, wherein the first and second cables are electric cables (claim 12).

Art Unit: 2831

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 2, 14, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scardina in view of Reynaert.

Scardina discloses a connector for a first information transmitting cable (14) which has an outer surface, an interior end, an exterior end, and a central conductor portion, the connector comprising a first conduit (sleeve 28) having open ends (first and second), one of the open ends adapted to receive the interior end of the first cable, the first conduit including a hollow interior to permit the passage of a fluid (34) therethrough, the first conduit being capable of forming a fluid tight seal between the first conduit and a portion of the first cable, and a second conduit (housing

Art Unit: 2831

30) having open ends, wherein the second conduit encases the first conduit to seal the first conduit within the second conduit (claim 14). Scardina also discloses an insulation sleeve adapted to cover the central conductor portion of the cable, wherein the first conduit is located on the insulation sleeve to create a fluid tight seal therebetween (claim 21) and a second cable having an outer surface, an interior end, an exterior end, and a central conductor portion, the second cable adapted to be received within the other of the open ends of the first conduit, wherein the first and second cables are electric cables (claim 23).

Scardina does not disclose the sleeve comprising a port providing fluid communication with the hollow interior of the sleeve (claims 2 & 14).

Reynaert discloses a connector comprising a sleeve (26) having a hollow interior and a port (36) providing fluid communication with the hollow interior of the sleeve. It would have been obvious to one skilled in the art to modify the connector of Scardina by providing a port in the sleeve (28) as taught by Reynaert such that the putty 22 can be introduced into the sleeve after the sleeve is wrapped around the cables. This modification would ease the process of providing the putty around the joint.

10. Claims 3, 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scardina in view of Reynaert as applied to claims 2 and 14 above and further in view of Tepel (2,247,671).

Art Unit: 2831

Claims 3, 4 and 15 additionally recite the injection port being an internally threaded opening and an internally threaded plug sealingly received within the port. Tepel discloses a connector for cable comprising an injection port (46) which is an internally threaded opening, and an internally threaded plug (47) is sealingly received within the port. It would have been obvious to one skilled in the art to apply the teaching of Tepel into the modified connector of Scardina by modifying the port to be an internally threaded opening and providing an internally threaded plug (40) to improve the tighten of the plug within the port.

11. Claims 5-8 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scardina in view of Reynaert as applied to the claims above and further in view of Smith (3,823,254).

Claims 5-7 and 16-18 additionally a tube which is sealingly received within the port and has an angularly disposed fin integrally formed with the tube. Smith discloses a connector comprising a tube (20) which is sealingly received within a port (18) and has an angularly disposed fin (not numbered, fig. 3) integrally formed with the tube. It would have been obvious to one skilled in the art to use the tube as taught by Smith for the plug (40) in the modified Scardina connector to improve the sealing at the port since the tube has the fin, it would not be withdrawn from the port easily.

Claims 8 and 19 additionally recite that there are a plurality of fins integrally formed with the tube. It would have been obvious to one skilled in the art to provide a plurality of fins on the

Art Unit: 2831

modified tube of Scardina to improve the tighten of the tube within the port since it has been held that merely duplicating the essential working part of a device involves only routine skill in the art.

St. Regis Pater Co. v. Bemis Co., 193 USPQ 8.

12. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scardina in view of Dery et al. (5,006,286).

Claims 9 and 11 additionally recite the first conduit being comprised of a heat shrinkable material. Dery et al. discloses a connector comprising a conduit (sleeve 102) which is made of a heat shrinkable material. It would have been obvious to one skilled in the art to use heat shrinkable material as taught by Dery et al. for the first conduit of Scardina such that a tight seal between the first conduit and the cables is provided without using the O-rings because the heat shrinkable sleeve is heat shrunk onto the cables.

13. Claims 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scardina in view of Reynaert as applied to claim 14 above and further in view of Dery et al. (5,006,286).

Claims 20 and 22 additionally recite the first conduit being comprised of a heat shrinkable material. Dery et al. discloses a connector comprising a conduit (sleeve 102) which is made of a heat shrinkable material. It would have been obvious to one skilled in the art to use heat shrinkable material as taught by Dery et al. for the first conduit of Scardina such that a tight seal

Art Unit: 2831

between the first conduit and the cables is provided without using the O-rings because the heat shrinkable sleeve is heat shrunk onto the cables.

14. Claims 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynaert in view of Hunter (4,764,232) and Scardina.

Reynaert discloses a connector for passing repair chemical through at least a first cable which has an outer surface, an interior end, an exterior end (the left side of the cable) and a central conductor portion, the connector comprising a sleeve (26) having a first end, a second end, a fluid injection port (36) and a hollow interior, the first end (the right side of the sleeve 26) of the sleeve adapted to fit over the exposed portion of the outer surface of the cable adjacent the exterior end thereof, and the second end of the sleeve adapted fit over a conductor contact (cable 12) which is attached to the central conductor portion of the first cable such that the sleeve creates a fluid tight seal for the passage of repair fluid into the port (claim 25). Reynaert also discloses an insulation sleeve (22) adapted to cover the central portion of the first cable wherein the sleeve (26) is located on the insulation sleeve to create a fluid tight seal therebetween (claim 32)

Reynaert does not disclose a cable adapter attachable to the outer surface of the first cable, the adapter located on the outer surface at a position remote from the exterior end of the cable to leave exposed a portion of the outer surface of the cable adjacent the exterior end thereof nor a housing encasing the sleeve to seal the sleeve within the housing (claim 25).

Art Unit: 2831

Hunter discloses a cable adapter (24,32) attachable to the outer surface of a first cable, the adapter located on the outer surface at a position remote from an exterior end of the cable to leave exposed a portion of the outer surface of the cable adjacent the exterior end thereof.

It would have been obvious to one skilled in the art to use the cable adapter as taught by Hunter in the connector of Reynaert, such as providing the sleeve (26) of Reynaert between elements 24 and 32 of Hunter, to provide a fluid tight seal between the sleeve and the cable without using hose clamps.

Scardina discloses a connector comprising a housing (30) encasing a sleeve (28) to seal the sleeve within the housing. It would have been obvious to one skilled in the art to use the housing as taught by Scardina to encase and to seal the sleeve of Reynaert for further protecting the joint between the cables.

15. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reynaert in view of Hunter and Scardina as applied to claim 25 above, and further in view of Tepel.

Claim 26 additionally recites an internally threaded plug sealingly received within the port.

Tepel discloses a connector for cable comprising an internally threaded plug (47) sealingly received within a port. It would have been obvious to one skilled in the art to modify the plug (40) of Reynaert to be an internally threaded plug as taught by Tepel to improve the tighten of the plug within the port.

Art Unit: 2831

16. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynaert in view of Hunter and Scardina as applied to claim 25 above, and further in view of Smith.

Claims 27-29 additionally recite a tube which is sealingly received within the port and has an angularly disposed fin integrally formed with the tube. Smith discloses a connector comprising a tube (20) which is sealingly received within a port (18) and has an angularly disposed fin (not numbered, fig. 3) integrally formed with the tube. It would have been obvious to one skilled in the art to use the tube as taught by Smith for the plug (40) of Reynaert to improve the sealing at the port since the tube has the fin, it would not be withdrawn from the port easily.

Claim 30 additionally recites that there are a plurality of fins integrally formed with the tube. It would have been obvious to one skilled in the art to provide a plurality of fins on the modified tube of Reynaert to improve the tighten of the tube within the port since it has been held that merely duplicating the essential working part of a device involves only routine skill in the art. St. Regis Pater Co. v. Bemis Co., 193 USPQ 8.

17. Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynaert in view of Hunter and Scardina as applied to claim 25 above, and further in view of Dery et al.

Claims 31 and 33 additionally recite the sleeve being comprised of a heat shrinkable material. Dery et al. discloses a connector comprising a sleeve (102) which is made of a heat shrinkable material. It would have been obvious to one skilled in the art to use heat shrinkable

Art Unit: 2831

material as taught by Dery et al. for the sleeve of Reynaert such that a tight seal between the sleeve and the cables is provided without using hose clamps because the heat shrinkable sleeve is heat shrunk onto the cables.

Allowable Subject Matter

- 18. Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 19. Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

20. Applicant's arguments with respect to claims 1, 14 and 25 have been considered but are most in view of the new ground(s) of rejection except for the following.

Regarding the 112, first paragraph problem, applicant argues that the ends of the first conduit are adapted to receive the interior end of either a first cable or a second cable. However, claim 1 does not recite such features.

Applicant further argues that there is no teaching or suggestion in Reynaert or Hunter for passing repair chemicals through a first cable. This argument is not found persuasive because the

Art Unit: 2831

sleeve of Reynaert comprises a port for fluid communication to the interior hollow of the sleeve and to the first cable, therefore, if it is necessary, repair chemicals can be introduced into the hollow interior of the sleeve and into the first cable. It has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Summary

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2831

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (703) 308-0693.

February 16, 2001

Dean A. Reichard